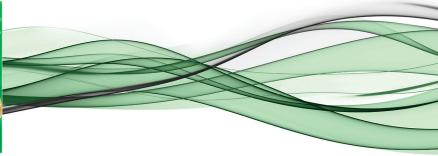
Spectra SP Series 4 to 32-Zone Expandable Security Systems







Description

Spectra SP control panels (SP4000, SP5500, SP6000, SP65, and SP7000) offer a combination of innovative features and an advanced communication bus for a uniquely expandable security system. Through its communication bus, all Spectra SP panels can be expanded via wireless and hardwired expansion modules and a variety of accessory modules. With their in-field firmware upgrade capability, the Spectra SP series allows installers to upgrade their system without hassle - quickly, easily, and on-site. To further facilitate installation, every Spectra SP panel can be configured using easy-to-follow, menu-driven programming.

Spectra SP also features multipath communication; this enables your system to communicate through multiple channels, including telephony with its built-in landline dialer, IP with the IP150 Internet Module, IP/GPRS/GSM with the PCS series module, and voice with the VDMP3 Plug-In Voice Module.

With its reliable communication technology, flexible expansion and user-friendly keypads, Spectra SP is the complete residential or commercial security solution.

Features

- Supports StayD mode
- 4-wire expansion bus
- Wireless expansion (via RTX3 / RX1)
- Expandable to 32 zones
- Expandable to 16 PGMs
- 2 partitions
- 32 user codes
- Supports PCS series modules
- Supports IP150 Internet Module
- Supports VDMP3 Plug-in Voice Module
- Supports REM3 Hand-held Remote Keypad
- · Supports SR150 Wireless Siren
- Landline dialer (except SP65)
- · In-field firmware upgradable



System Overview

Control Panels



SP65

SP65: 9 to 32-Zone Control Panel SP4000: 4 to 32-Zone Control Panel SP5500: 5 to 32-Zone Control Panel SP6000: 8 to 32-Zone Control Panel SP7000: 16 to 32-Zone Control Panel

Wired Keypads



TM70

TM70: Intuitive Touchscreen TM50: Intuitive Touchscreen

K32LX: Wired LCD Keypad with Integrated RF

Transceiver

32-Character Wired LCD Keypad Module K32LCD+: 32-Zone Wired Fixed LCD Keypad Module K35: 32-Zone Wired LED Keypad Module K32+: K10V: 10-Zone Wired LED Keypad

10-Zone Wired LED Keypad K10H: K636: 10-Zone LED Keypad Module

Video Monitoring



Outdoor 720p HD Camera HD88: HD78F: **Event-Driven Indoor**

Security IP Camera /

Detector



HD88

Expansion Modules



ZX82: 8-Zone Expansion Module ZX8SP: 8-Zone Expansion Module ZX8: 8-Zone Expansion Module PGM82: 8-PGM Expansion Module PGM4: 4-PGM Expansion Module RTX3: Wireless Expansion Module

ZX82

RX1: Wireless Receiver

Communicator Modules



PCS265LTE: LTE / 4G / 3G / 2G / GSM

Communicator Module

PCS250 / G: GPRS / GSM

Communicator Module IP150. **IP Communicator**

PCS265LTE VDMP3: Plug-In Voice Module

Software & Accessories



Insite GOLD: Mobile App

2.8A Supervised Power PS25:

Supply

PS45: 5A Supervised Bus

Power Supply 2 Port HUB

HUB2: PMC5: Memory Key Insite **GOLD**

307USB: **Direct Connect Interface** BabyWare: **PC Software** InField: Firmware Upgrade

Software

Wireless Keypads and Remotes



32-Zone Wireless Fixed LCD Keypad K37: REM3: Hand-Held Two-Way Remote Control Keypad 2-Way Remote Control with Backlit Buttons REM25: REM2: 2-Way Remote Control with Backlit Buttons REM1: Remote Control with Backlit Buttons REM15: Remote Control with Backlit Buttons REM101: Emergency / Panic Remote Control Remote Control with Integrated Access Card RAC1:

K37

PMD85

Wireless Devices

PMD85: Wireless Outdoor Digital Dual-Optic

High-Performance PIR

PMD75: Wireless Digital Dual-Optic High-Performance PIR

Wireless PIR Motion Detector with Built-in PMD2P:

Pet Immunity

NV75MR: Wireless 16M Dual Mironel Optics Pet Immune Anti-Mask Detector

NV35MR: Wireless Outdoor / Indoor Window and Sliding Door Dual Detector with

Anti-Masking and Pet Immunity NV780MR: Wireless Dual Side-View Outdoor Detectors

with Anti-Masking and Pet Immunity

DCT6: Wireless Door Contact

DCT10: Wireless 2-Zone Long-Range Door Contact

DCTXP2: 2-Zone Wireless Door Contact DCT2: Wireless Ultra-Small Door Contact G550: Wireless Glass Break Detector GS250: **Gpower Wireless Multi-axis Detector** SD360: Wireless Ceiling-Mounted Smoke Detector SR130: Wireless Outdoor Siren with Built-in

Strobe Light

SR150: Wireless Outdoor Siren with Built-in

Strobe Light

RPT1: Wireless Repeater Module 2WPGM: 2-Way Wireless PGM

For compatibility details, visit us at paradox.com

Feature Details



Internet Communication (IP150)

The IP150 Internet Module allows you to control and monitor your security system remotely through any web browser. It allows for email notifications of important system events such as alarms, arm/disarm events, and troubles. For example, receive an email at work when your kids get back from school. Also, view the live status of your system and arm/disarm it. For instance, you have just left your office for the weekend but are unsure whether you armed the system. Simply check the status of your system from a laptop and arm it.



Wireless Communication (PCS Series)

The PCS series modules provide the Spectra SP control panels with wireless communication capabilities to report system events via IP, GPRS, and/or GSM. Whether it be uploading/downloading via IP or GPRS, receiving system status and events by voice or text message, or reporting to the monitoring station via IP, GPRS, or GSM, the PCS series enhances the communication capabilities of any Spectra SP installation.



Voice Communication (VDMP3)

The VDMP3 is a plug-in, voice-assisted module that can be programmed to call up to five telephone numbers in the event of an alarm. For example, when an alarm occurs at your store during off-hours, every employee can receive notification via telephone. You can also call the VDMP3 from an outside line, enabling you to arm or disarm the system as well as activate PGMs. The VDMP3 essentially turns any outside telephone into a keypad. The VDMP3 is easy to install; plug it in directly onto the panel, set the phone numbers, and select the activation event.



StayD

StayD resolves all issues with common security systems and represents the only solution for secure living. The revolutionary StayD feature represents a completely reversed philosophy compared to all other security systems made today. Traditional systems share the same principle - in order to provide security, users must remember to arm the system; otherwise the system is disarmed and does not provide security. A StayD system is always armed, and needs only to be partly disarmed when an entry or exit is needed. With StayD, you can truly have peace of mind knowing, that you are always protected.



In-field Upgradable

Spectra SP is not only easy to install, but is also fully in-field upgradable, allowing for simple on-site updates. The process is effortless; connect the PC to the panel and you are a few clicks away from performing a complete system upgrade within minutes. No need to change panels or hardware; all the updates are performed using Paradox's InField Firmware Upgrade Software.



App-based System Control

The Insite GOLD app enables you to remotely access your Paradox security system and view your system cameras. Insite GOLD provides lots of functionality and information at one's fingertip. It has an intuitive user-interface which enables you to easily connect to your security system and edit settings. Now you can control your Paradox security system from any Android / iOS smartphone.

TM70 Overview



____ 7 in

TM70: Intuitive Touchscreen

17.7 cm

SpotOn Locator™

Upload photos, images, or schematics to eliminate the need for deciphering LED zone lights. These images display any door, window, or motion detector that are active. Since the images are uploaded by the user, they are truly customized, and can be unique to each installation. SpotOn Locator™ is integrated in the original firmware, and when purchased, is unlocked with an authorization code.

■ OneScreen Monitoring[™]

Provides a real-time visual display of the system's status on one screen. It allows the user to choose which partitions will be displayed showing arming level, alarm, ready, and troubles. It also displays zone statuses; open, close, bypass, alarm, and tamper. OneScreen Monitoring™ also features Solo Test™ mode, which allows installers and users to easily test all system zone's via the TM70 Touch's screen. OneScreen Monitoring™ is integrated in the original firmware, and when purchased, is unlocked with an authorization code.

Specifications

Display	16-bit, color LCD; 8.6 x 15.4 cm (3.1 x 5.9 in.), 800 x 480 pixels						
Input Voltage	9 to 15 Vdc						
Current Consumption	250 mA at max brightness + 80 mA sounder						
Keypad Zone Input	1 for a detector or external temperature sensor						
Tamper	Built-in, cover and wall						
Humidity	5 to 90%						
Operating Temperature	-10 to 55 °C (14 to 131 °F)						
Compatibility	Swan, EVO, Spectra, Magellan						

Note: All control panel outputs are rated to operate between 11.4 Vdc and 12.5 Vdc.



$Specifications\ PRX2780000033\text{-}P2C$

The PRX2780000033-P2C is a metal box enclosure for provision multiple module and panel mounting.

Features:

- Many punch-out holes for simple wiring
- Easy door removal
- Sizes: 28cm X 28cm X 7.6cm (11" x11" x 3")





Specifications PRXK-TK278

The PRXK-TK278 is a BOM Kit for 1x tamper switch PRX2502302000-P2C and 1x tamper bracket PRX2781030000-P2C to suit with Paradox Metal Box Enclosure PRX2780000033-P2C; to protects against tampering (opening door or removal from wall).



SP5500+ / SP6000+ / SP7000+ User Guide

4 to 32-Zone Expandable Security Systems





DG/DMP55+/65+

Installation Manual V1.0

Digital Motion Detectors Dual / Quad Element

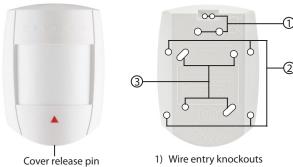


General Description

Thank you for choosing the DG55+/DG65+ indoor high-performance PIR motion detector for your protection needs. The DG/DMP55+/65+ offers superior protection for areas up to 12m x 12m (40 ft x 40 ft).

Installation

- 1) Remove the cover (Figure 1).
- 2) Loosen the PCB screw and remove the PCB (Figure 2 (3)).
- 3) Drill or punch out the selected knockout holes (Figure 1) and secure the detector back using appropriate mounting screws.



- 1) Wire entry knockouts
- 2) Corner-mount knockouts
- 3) Wall-mount knockouts

Figure 1

- 4) Replace the PCB and verify that the height settings match the actual installation height (Figure 2).
- 5) Pull the wires through the knockout holes and mount the back cover.

WARNING: Do not obscure partially or completely the detector's field of view.

Detector Settings (Figure 2)

LED (J1): Jumper On - LED On; Off - LED Off

Digital Sensitivity (J2): Jumper On- Normal Sensitivity; Off - High Sensitivity

Single / Dual (J3): Jumper On- Single edge; Off - Dual edge

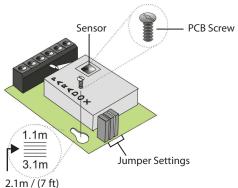
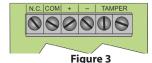


Figure 2

Powering the Detector

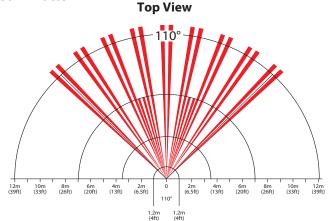
Powering the detector initiates a self-test and the red LED flashes for 5 seconds. When the red LED is no longer flashing, the detector is ready.



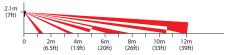
Walk-Test

In Normal Sensitivity and Single Edge mode, you should be detected after 3 $\,$ steps at 40 ft (12m). High Sensitivity mode should give you more range.

Beam Pattern



Side View



LED Feedback

Alarm: Solid red for three seconds

Pre-alarm: Flashing red

Power-up: Flashing red for five seconds

Technical Specifications

Sensor type	DG/DMP55+: Dual Element Infrared
	DG/DMP65+: Quad Element Infrared
Sensor geometry	DG/DMP55+: Rectangular
	DG/DMP65+: ISG (Interlock)
Coverage 110°	12m x 12m (40 ft x 40 ft)
(standard)	12 × 12 (10.10 × 10.10)
Installation height	2.1m to 2.7m (7 ft to 9 ft)
RFI / EMI rejection	10V/m rejection from 10 MHz to 2.7 GHz
Voltage input	9 to 16 Vdc
Nominal operating	12 Vdc
voltage	
Current consumption	Max: 300 mA in set mode
	Min: 15 mA in unset mode
Anti-tamper switch	150 mA / 28 Vdc, N.C.
Lens	2nd generation Fresnel lens, LODIFF*, segments
Alarm output	DG55+/DG65+ = Form A relay 100 mA / 28 Vdc, N.C.
	DMP55+/65+ = EVO bus connection
Detection speed	0.2m/s to 3.5m/s (0.6 ft/s to 11.5 ft/s) Ingress
Operating temperature	-20°C to + 50°C (-4°F to +122°F)
Standards	EN 50131-1, EN 50131-2-2 Security Grade 2,
	Environmental Class II
	Certification Body: Applica Test and Certification

Warranty

For complete warranty information on this product, please refer to the Limited Warranty Statement found on the website www.paradox.com/terms or contact your local distributor. © 2020 Paradox Security Systems (Bahamas) Ltd. All rights reserved. Specifications may change without prior notice.

One or more of the following US patents may apply: 7046142, 6215399, 6111256, 6104319, 5920259, 5886632, 5721542, 5287111, and RE39406 and other pending patents may apply. Canadian and international patents may also apply. LODIFF® lens: patent #4,787,722 (U.S.). Canadian and International patents may also apply. LODIFF® a registered trademark of Fresnel Technologies Inc.

DG5565+-EI02 05/2020 PARADOX.COM



Specifications PRXK32LCD+-N3Q

The PRXK32LCD+-N3Q is a 32-Character Hardwired LCD Keypad Module.

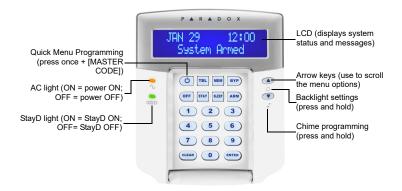
Features:

- Beautiful new design
- 32-character blue LCD with programmable labels
- Real-time zone alarm display (until disarmed)
- In-field firmware upgrade via 307USB
- StayD status LED
- Menu-driven programming for easy system setup (installer and end user)
- 1 keypad zone input
- Independently set chime zones
- 8 one-touch action buttons
- 3 keypad-activated panic alarms
- Adjustable backlight, contrast and scroll speed
- Connects to 4-wire expansion bus
- Compatible with MG5000, MG5050, MG5075, and Spectra SP series V2.31 and up
- Compatible with SP4000, SP65 V4.90 and up



Quick Start

K32LCD+ Keypad



How To Arm

Arming When Exiting (Regular Arm)

To arm your system when exiting:

,	,
Step	Description
1.	Close all zones in the desired partition.
2.	Press [ARM] and enter your [ACCESS CODE].

Note: To arm with StayD enabled, refer to the StayD user manual, available at paradox.com. To learn more about StayD, contact your installer.

Arming When Staying (Stay / Sleep Arm)

To arm your system when staying:

Step	Description
1.	Press [STAY] for stay arming or [SLEEP] for sleep arming and then enter your [ACCESS CODE].

2. Select the desired partition (1 or 2). For both, press one, then the other after the beep.

How to Disarm

To disarm your system when entering:

Step	Description
1.	Press [OFF] and enter your [ACCESS CODE].
2.	Select the desired partition (1 or 2). For both, press one, then the other after the beep.

Panic Keys

To send a silent or audible alarm to your security company, press and hold one of the key combinations listed below, for two seconds.

Panic Alarm	Key Combinations
Police	Keys [1] & [3]
Medical	Keys [4] & [6]
Fire	Keys [7] & [9]

Alarm Memory Display

To view the alarms that occurred during the last armed period:

Step	Description
1.	Disarm the system.
2.	Press [MEM]. All zones that were breached during the last armed period will be displayed. Use the arrow keys to view the zones.
3.	Press [ENTER] to save and exit.

Trouble Display

The LCD screen will display all troubles when they occur. To view and clear troubles:

room. To viou and oloar doubloo.					
Step	Description				
1.	Press [TBL].				
2.	Scroll through the list of troubles using the arrow keys. Refer to the MGSP User Guide for trouble descriptions and instructions.				
3.	Perform the recommended repair instructions to clear the trouble. If no instructions are given, contact your security company.				
4.	Press [CLEAR] to exit.				

How to Bypass Zones

When a zone is bypassed, it remains unarmed when the corresponding area is armed. To bypass zones:

Step	Description	
1.	Press [BYP].	
2.	Enter your [ACCESS CODE].	
3.	Select the zone you want to bypass by entering the zone number, e.g., zone 3=03.	
4.	Press [Enter].	

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Specifications DFMWP16

The DFMWP16 is combo siren and strobe (slim design).

- New design
- Siren tone selectable for different applications
- Sound volume adjustable: low dB for testing and high dB for normal operation
- Bright: new LED strobe design
- Independent siren and strobe operation
- High quality UV treated case
- Weatherproof
- Front and back tampers
- EOLRs built in, suitable for most major alarm panels

Operating voltage: 9-15VDC

SPL @ 1meter: 110dB

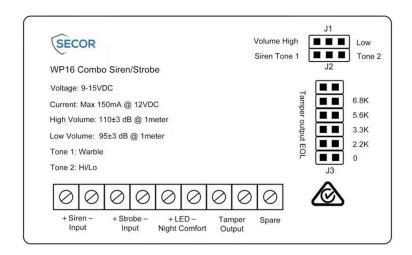
Siren current draw: 150mA

Strobe current draw: 50mA

Siren tone selectable: Tone 1: warble; Tone 2: Hi/Lo

Dimension: 200 x 110 x 40mm









Specifications DFMWP08

The DFMWP08 is indoor top hat piezo.

Input voltage: 12VDC

SPL @ 1meter: 105dB

Current draw: 90mA





VRLA 12V7AH

SA12V7

Specifications

Nominal Voltage Nominal Capacity 20HR

Dimensions

Approx Weight

Terminal

Container Material

Lead Material

Sulfurid Acid Separator

Rated Capacity

Max. Discharge Current

Internal Resistance

Operating Temp.Range

Nominal Operating Temp.Range

Cycle Use

Standby Use

Capacity affected by Temperature

Self Discharge

12 V

7.0 AH

 Length
 151±1mm [5.94 inches]

 Width
 65±1mm [2.56 inches]

 Container Height
 95±1mm [3.74 inches]

Container Height 95±1mm (3.74 inches)
Total Height (with terminal) 100±1mm (3.94 inches)

Approx 2.10 kg (4.63 lbs)

F1

ABS Plastic

Purity Lead 99.995%

Distilled Sulfurid Acid (Zero metal content)

AGM

7.00 AH/0.350A [20hr, 1.80V/cell, 25°C/77°F] 6.53 AH/0.653A [10hr, 1.80V/cell, 25°C/77°F] 6.00 AH/1.20A [5hr, 1.75V/cell, 25°C/77°F] 5.37 AH/1.79A [3hr, 1.75V/cell, 25°C/77°F] 4.55 AH/4.55A [1hr, 1.60V/cell, 25°C/77°F]

105A (5s)

Approx $23m\Omega$

Discharge: -15 - 50°C (5 - 122°F) Charge: 0 - 40°C (32 - 104°F) Storage: -15 - 40°C (5 - 104°F)

25±3°C [77±5°F]

Initial Charging Current less than 2.1A. Voltage

14.4V - 14.7V at 25°C (77°F) Temp.Coefficient -30mV/°C

No limit on Initial Charging Current Voltage

13.5V - 13.8V at 25°C (77°F) Temp.Coefficient -20 mV/°C

40°C [104°F] 103% 25°C [77°F] 100% 0°C [32°F] 86%

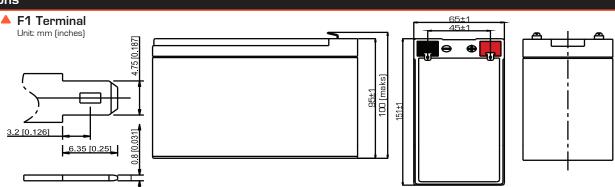
Sentry AGM series batteries may be stored for up to 6 months at 25° C (77° F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



Applications

- All purpose
- Standby Applications
- Recreation Vehicles
- Uninterruptible Power Supply (UPS)
- Electric Power System (EPS)
- Fire & Security
- Generators
- Medical Equipment

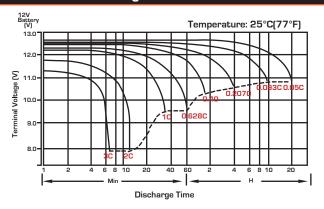
Dimensions



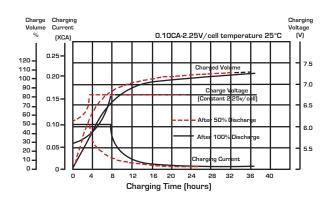
	Constant Current Discharge (Amperes) at 25°C (77°F)														
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	18.0	12.8	10.48	8.79	6.53	4.79	3.86	2.29	1.69	1.36	1.14	0.98	0.774	0.640	0.345
1.80V/cell	21.4	14.3	11.4	9.44	6.94	5.05	4.03	2.38	1.74	1.40	1.17	1.01	0.791	0.653	0.350
1.75V/cell	24.2	15.6	12.2	10.0	7.29	5.27	4.18	2.45	1.79	1.43	1.20	1.03	0.805	0.663	0.357
1.70V/cell	26.7	16.7	12.9	10.5	7.59	5.46	4.32	2.51	1.83	1.46	1.22	1.05	0.817	0.672	0.361
1.65V/cell	28.8	17.7	13.5	10.9	7.86	5.62	4.46	2.57	1.86	1.48	1.23	1.06	0.826	0.680	0.365
1.60V/cell	30.6	18.6	14.1	11.3	8.09	5.76	4.55	2.61	1.89	1.50	1.25	1.07	0.834	0.685	0.367

	Constant Power Discharge (Watts/Cell) at 25°C (77°F)														
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	34.2	24.5	20.2	17.1	12.8	9.44	7.64	4.56	3.37	2.72	2.29	1.99	1.565	1.296	0.701
1.80V/cell	40.2	27.2	21.9	18.3	13.5	9.91	7.96	4.72	3.47	2.79	2.34	2.03	1.593	1.318	0.708
1.75V/cell	45.1	29.5	23.3	19.3	14.2	10.3	8.23	4.85	3.55	2.85	2.39	2.06	1.616	1.344	0.719
1.70V/cell	49.2	31.3	24.5	20.1	14.7	10.6	8.48	4.96	3.62	2.89	2.42	2.09	1.633	1.347	0.725
1.65V/cell	52.6	32.9	25.5	20.8	15.2	10.9	8.73	5.05	3.68	2.93	2.45	2.11	1.649	1.359	0.731
1.60V/cell	55.5	34.3	26.3	21.5	15.5	11.2	8.88	5.12	3.72	2.96	2.47	2.13	1.660	1.367	0.734

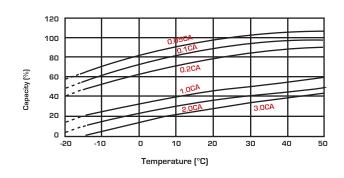
Discharge Characteristics



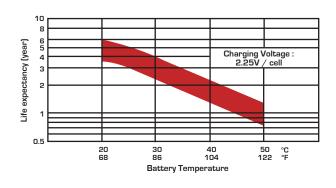
Float Charging Characteristics



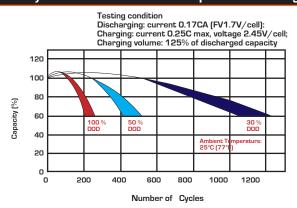
Temperature Effects in Relation to Battery Capacity



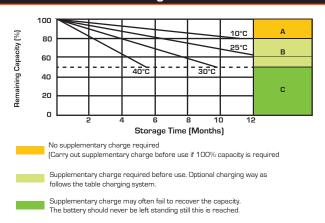
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



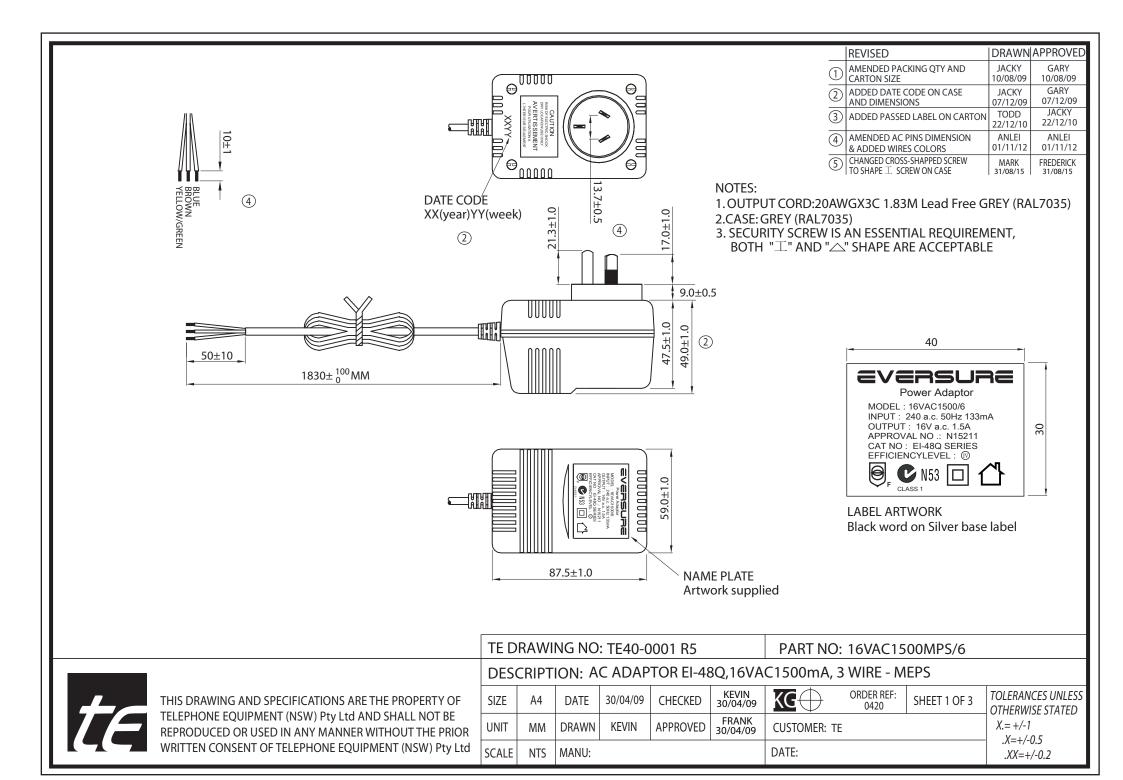
Charging System

DOD	Currency Limit (A)	Constant Voltage (V)	Fully Charged Time (h)
	0.15C₁₀	13.5-13.8 vpc (12V)	10
20	0.20C ₁₀	6.75-6.9 vpc (6V)	8
50	0.15C₁₀	13.5-13.8 vpc (12V)	15
	0.20C ₁₀	6.75-6.9 vpc (6V)	12
80	0.15C₁₀	13.5-13.8 vpc (12V)	16
	0.20C ₁₀	6.75-6.9 vpc (6V)	14
100	0.15C₁₀	13.5-13.8 vpc (12V)	20
	0.20C ₁₀	6.75-6.9 vpc (6V)	18

State of Charge (SOC)

Open Circuit Voltage (V/cell)	Open Circuit Voltage (12V/cell)	Open Circuit Voltage (6V/cell)	State of Charge (% of full charge capacity)
2.14-2.15	12.84-12.90	6.42-6.46	100
2.12-2.13	12.72-12.78	6.36-6.39	90
2.11	12.66	6.33	80
2.09	12.54	6.27	70
2.07	12.42	6.21	60
2.05	12.30	6.15	50





1. Primary rated input voltage AC240V 50Hz 133mA 2. Secondary rated output voltage and current Loaded Voltage: AC 18 V ± 5% AT 1500 mA 3. Ripple voltage *** mV (RMS) MAX. AT Rated Loading 4. Insulation resistance Primary - secondary: DC 500 V 100 MΩ Min 5. Dielectric withstand test Primary - secondary: AC 3.64 KV 1 seconds 6. Temperature rise At rated loading 90°C max. For input coil (By resistance method) and 55°C max. on case surface (By use of thermometer) 7. EFFICIENCY ≥ 79% 8. Leadout Primary SAA PLUG IN TYPE 8. Leadout PVC cable length: 1.8 Meter Colour : GREY (RAL7035) Wire size AWG#20/3C Plug : STRIPPED AND TINNED PRIMARY SECONDARY 9. Test circuit LOADING 1. OADING LOADING 1. OADING 1. OADING LOADING 1. OADING 1. O	ITE:	\ A	CRECIFICATION				
2. Secondary rated output voltage and current Loaded Voltage : AC 18 V ± 5% AT 1500 mA	ITEM		SPECIFICATION				
voltage and current 3. Ripple voltage 4. Insulation resistance Primary - secondary: DC 500 V 100 M Ω Min 5. Dielectric withstand test Primary - secondary: AC 3.64 KV 1 seconds 6. Temperature rise At rated loading 90°C max. For input coil (By resistance method) and 55°C max. on case surface (By use of thermometer) 7. EFFICIENCY Primary SAA PLUG IN TYPE 8. Leadout Primary Secondary PVC cable length: 1.8 Meter Colour : GREY (RAL7035) Wire size AWG#20/3C Plug : STRIPPED AND TINNED PRIMARY SECONDARY 9. Test circuit							
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6. Temperature rise At rated loading 90°C max. For input coil (By resistance method) and 55°C max. on case surface (By use of thermometer) 7. EFFICIENCY ≥ 79% Primary SAA PLUG IN TYPE 8. Leadout PVC cable length: 1.8 Meter Colour: GREY (RAL7035) Wire size: AWG#20/3C Plug: STRIPPED AND TINNED PRIMARY PRIMARY SECONDARY 9. Test circuit	4. Insulation resistance		Primary - secondary: DC 500 V 100 M Ω Min				
and 55℃ max. on case surface (By use of thermometer) 7. EFFICIENCY ≥ 79% Primary SAA PLUG IN TYPE 8. Leadout Secondary PVC cable length: 1.8 Meter Colour : GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED PRIMARY SECONDARY THERMAL FUSE 9. Test circuit	5. Dielectric withstand test		Primary - secondary: AC 3.64 KV 1 seconds				
and 55℃ max. on case surface (By use of thermometer) 7. EFFICIENCY ≥ 79% Primary SAA PLUG IN TYPE 8. Leadout Secondary PVC cable length: 1.8 Meter Colour : GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED PRIMARY SECONDARY THERMAL FUSE 9. Test circuit	6. Temperature rise		At rated loading 90°C max, For input coil (By resistance method)				
7. EFFICIENCY ≥ 79% 8. Leadout Primary SAA PLUG IN TYPE Secondary PVC cable length: 1.8 Meter Colour : GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED PRIMARY SECONDARY THERMAL FUSE PRIMARY PRIMARY PRIMARY A THERMAL FUSE							
8. Leadout Secondary PVC cable length: 1.8 Meter Colour : GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED PRIMARY SECONDARY THERMAL FUSE 9. Test circuit	7. EFFICIENCY						
Secondary PVC cable length: 1.8 Meter Colour GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED PRIMARY SECONDARY THERMAL FUSE 9. Test circuit		Primary	SAA PLUG IN TYPE				
9. Test circuit Colour : GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED PRIMARY SECONDARY THERMAL FUSE O O O O O O O O O O O O O	8. Leadout						
9. Test circuit Wire size: AWG#20/3C Plug: STRIPPED AND TINNED PRIMARY SECONDARY THERMAL FUSE PRIMARY SECONDARY THERMAL FUSE		Secondary	PVC cable length: 1.8 Meter				
9. Test circuit Plug : STRIPPED AND TINNED PRIMARY SECONDARY THERMAL FUSE			Colour GREY (RAL7035)				
9. Test circuit			Wire size: AWG#20/3C				
9. Test circuit			Plug : STRIPPED AND TINNED				
9. Test circuit		I	PRIMARY SECONDARY				
LOADING	9. Test circuit		THERMAL MILE AND A THERMAL				
			LOADING				
10. Case SAA48 colour = GREY (RAL7035)	10. Case		SAA48 colour = GREY (RAL7035)				

		REVISED	DRAWN	APPROVED
(1	AMENDED PACKING QTY AND CARTON SIZE	JACKY 10/08/09	GARY 10/08/09
(2	ADDED DATE CODE ON CASE AND DIMENSIONS	JACKY 07/12/09	GARY 07/12/09
(3	ADDED PASSED LABEL ON CARTON	TODD 22/12/10	JACKY 22/12/10
(4	AMENDED AC PINS DIMENSION & ADDED WIRES COLORS	ANLEI 01/11/12	ANLEI 01/11/12
(5	CHANGED CROSS-SHAPPED SCREW TO SHAPE ⊥ SCREW ON CASE	MARK 31/08/15	FREDERICK 31/08/15

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TE DRAWING NO: TE40-0001 R5

DESCRIPTION: AC ADAPTOR EI-48Q,16VAC1500mA, 3 WIRE - MEPS

SIZE	A4	DATE	30/04/09	CHECKED	KEVIN 30/04/09	KG	ORDER REF: 0420	SHEET 2 OF 3	TOLERANCES UNLESS OTHERWISE STATED		
UNIT	MM	DRAWN	KEVIN	APPROVED	FRANK 30/04/09	CUSTOMER: TE			X.= +/-1 X=+/-0.5 .XX=+/-0.2		
SCALE	NTS	MANU:				DATE:					

PART NO: 16VAC1500MPS/6

